



Arch Chemicals, Inc.

MATERIAL SAFETY DATA

FOR ANY EMERGENCY, CALL 24 HOURS/7 DAYS:	1-800-654-6911
FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:	1-800-424-9300
FOR ALL MSDS QUESTIONS & REQUESTS, CALL MSDS CONTROL:	1-800-511-MSDS

PRODUCT NAME: HTH® SPA CLARIFIER

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

REVISION DATE: 03-31-2003 SUPERCEDES: 03-30-2003
MSDS NO: 00010-0016 - 86203

MANUFACTURER: Arch Chemicals, Inc. 501 Merritt 7 PO Box 5204 Norwalk, CT 06856-5204

SYNONYMS: None
CHEMICAL FAMILY: Cationic polymer
FORMULA: Not Applicable/Mixture
DESCRIPTION: Coagulant
OSHA HAZARD CLASSIFICATION: This product is not considered to be hazardous per 29 CFR 1910.1200.

SECTION 2 COMPONENT DATA

PRODUCT COMPOSITION
DESCRIPTIVE NAME: Cationic polymer
CAS NUMBER: Supplier Proprietary
PERCENTAGE RANGE: 1-6%
HAZARDOUS PER 29 CFR 1910.1200: No
EXPOSURE STANDARDS: None Established

CAS or CHEMICAL NAME: Water
CAS NUMBER: 7732-18-5
PERCENTAGE RANGE: 94-99%
HAZARDOUS PER 29 CFR 1910.1200: No
EXPOSURE STANDARDS: None Established

SECTION 3 PRECAUTIONS FOR SAFE HANDLING AND STORAGE

DO NOT TAKE INTERNALLY. AVOID CONTACT WITH SKIN, EYES, AND CLOTHING. UPON CONTACT WITH SKIN OR EYES, WASH OFF WITH WATER.

STORAGE CONDITIONS:

DO NOT STORE AT TEMPERATURES BELOW: 3.3 Deg.C (38 Deg.F)

PRODUCT STABILITY AND COMPATIBILITY

INCOMPATIBLE MATERIALS FOR STORAGE OR TRANSPORT: Refer to Section VII

SECTION 4 PHYSICAL DATA

APPEARANCE: Clear blue liquid
FREEZING POINT: -2.8-0 Deg.C (27-32 Deg.F)
BOILING POINT: >100 Deg.C (>212 Deg.F)
DECOMPOSITION TEMPERATURE: No Data

SPECIFIC GRAVITY: 1.00-1.033
DENSITY: 1.09 (g/ml)
pH: 6-8
VAPOR PRESSURE @ 25 DEG.C: Same as water
SOLUBILITY IN WATER: Completely soluble
VOLATILES, PERCENT BY VOLUME: >95
EVAPORATION RATE: 1 (water=1)
VAPOR DENSITY: Same as water
MOLECULAR WEIGHT: Not Applicable/Mixture
ODOR: None
COEFFICIENT OF OIL/WATER DISTRIBUTION: No Data

SECTION 5 PERSONAL PROTECTIVE EQUIPMENT REQUIREMENTS

PERSONAL PROTECTION FOR ROUTINE USE OF PRODUCT:
RESPIRATORY PROTECTION: Respiratory protection not normally needed.
VENTILATION: None beyond normal ventilation.
SKIN AND EYE PROTECTIVE EQUIPMENT: Use safety glasses with side shields.

EQUIPMENT SPECIFICATIONS:

RESPIRATOR TYPE: Not normally needed
PROTECTIVE CLOTHING TYPE (This includes: gloves, boots, apron,
protective suit); None required

SECTION 6 FIRE AND EXPLOSION HAZARD INFORMATION

FLAMMABILITY DATA:

FLAMMABLE: No
COMBUSTIBLE: No
PYROPHORIC: No
FLASH POINT: >93 Deg.C (>200 Deg.F)
AUTOIGNITION TEMPERATURE: Not Applicable
FLAMMABLE LIMITS AT NORMAL ATMOSPHERIC TEMPERATURE AND PRESSURE (PERCENT
VOLUME IN AIR): Not Applicable

NFPA RATINGS:

Not Established

HMIS RATINGS:

Health: 0
Flammability: 0
Reactivity: 0

EXTINGUISHING MEDIA:

Not Applicable-Choose extinguishing media suitable for surrounding materials.

FIRE FIGHTING TECHNIQUES AND COMMENTS: Use water to cool containers exposed to fire.

SECTION 7 REACTIVITY INFORMATION

CONDITIONS UNDER WHICH THIS PRODUCT MAY BE UNSTABLE:

TEMPERATURES ABOVE: Stable at normal room temperature.
HAZARDOUS POLYMERIZATION: Will not occur
INCOMPATIBLE MATERIALS: Strong acids and bases, carbon steel, copper
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide,
hydrogen chloride, ammonia, oxides of nitrogen
SUMMARY OF REACTIVITY:
OXIDIZER: No
PYROPHORIC: No
ORGANIC PEROXIDE: No
WATER REACTIVE: No

SECTION 8 FIRST AID

EYES: Not an eye irritant. Washing any substance from the eye with water is a good safety practice.

SKIN: Not a skin irritant. Washing any substance off the skin with water is a good safety practice.

INGESTION: This product is not toxic by ingestion. Drink water to dilute.

INHALATION: Not a likely route of exposure.

SECTION 9 TOXICOLOGY AND HEALTH INFORMATION

ROUTES OF ABSORPTION

This product will not exert a significant adverse effect to health from any route of exposure.

WARNING STATEMENTS AND WARNING PROPERTIES

DO NOT TAKE INTERNALLY.

HUMAN THRESHOLD RESPONSE DATA

ODOR THRESHOLD: No Data

IRRITATION THRESHOLD: No Data

IMMEDIATELY DANGEROUS TO LIFE OR HEALTH: The IDLH concentration has not been established for this product

SIGNS, SYMPTOMS, AND EFFECTS OF EXPOSURE

INHALATION:

ACUTE:

No significant adverse effects to health would be expected to occur from inhalation.

CHRONIC:

There are no known or reported effects from chronic exposure.

SKIN:

No significant adverse effects to health would be expected to occur from dermal contact.

EYE:

No significant adverse effects to health would be expected to occur from eye contact.

INGESTION:

ACUTE:

This product is considered practically nontoxic from oral ingestion.

There are no known or reported effects from acute ingestion.

CHRONIC:

There are no known or reported effects from chronic exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

There are no medical conditions known to be aggravated by exposure.

INTERACTIONS WITH OTHER CHEMICALS WHICH ENHANCE TOXICITY

There are no chemicals known to enhance the toxicity of the product.

ANIMAL TOXICITY

Acute Toxicity:

Inhalation LC 50: No Data

Dermal LD 50: > 2 g/kg. (rabbit)

Oral LD 50: > 5 g/kg. (rat)
Irritation: Not a skin or eye irritant

ACUTE TARGET ORGAN TOXICITY

There are no organs known to be damaged from exposure to this product.
Data indicates that this product will not produce an allergic skin reaction.

CHRONIC TARGET ORGAN TOXICITY

There are no known or reported effects from repeated exposure.

REPRODUCTIVE AND DEVELOPMENTAL TOXICITY

A teratology study in rabbits and a two-generation reproduction study in rats showed this product did not produce birth defects or affect reproduction.

CARCINOGENICITY

This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, or EPA.

MUTAGENICITY

This product is not known or reported to be mutagenic.
A similar product has been tested and was found to be negative for mutagenicity in the Ames assay.

AQUATIC TOXICITY

The following data was generated with 40% active ingredient:
Bluegill sunfish, 96 hr. LC50: 0.82-1.3 mg/l
Rainbow trout, 96 hr. LC50: 0.37 mg/l
Daphnia magna, 48 hr. LC50: 0.9 mg/l (in clear water)
Daphnia magna, 48 hr. LC50: 1.2-2.5 mg/l (in 50 ppm clay suspension)

SECTION 10 TRANSPORTATION INFORMATION

THIS MATERIAL IS NOT REGULATED AS A DOT HAZARDOUS MATERIAL.

SECTION 11 SPILL AND LEAKAGE PROCEDURES

FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC AT 800-424-9300.

REPORTABLE QUANTITY: Not Applicable (Per 40 CFR 302.4)

SPILL MITIGATION PROCEDURES:

Water Release - this material is heavier than water. This material is soluble in water.

Land Spill - Compatible absorbents: Saw dust, Sand, Clay soil, and Commercial absorbents.

SPILL RESIDUES: Dispose of per guidelines under Section XII, WASTE DISPOSAL.

PERSONAL PROTECTION FOR EMERGENCY SPILL AND FIRE-FIGHTING SITUATIONS:

In case of fire, use normal fire fighting equipment, including a NIOSH approved self-contained breathing apparatus (SCBA).

SECTION 12 WASTE DISPOSAL

If this product becomes a waste, it DOES NOT meet the criteria of a hazardous waste as defined under 40 CFR 261, in that it does not exhibit the

characteristics of hazardous waste of Subpart C, nor is it listed as a hazardous waste under Subpart D.

As a nonhazardous liquid waste, it should be disposed of in accordance with local, state and federal regulations by treatment in a wastewater treatment system.

CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THIS MATERIAL. THE USER OF THIS MATERIAL HAS THE RESPONSIBILITY TO DISPOSE OF UNUSED MATERIAL, RESIDUES AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS REGARDING TREATMENT, STORAGE AND DISPOSAL FOR HAZARDOUS AND NONHAZARDOUS WASTES.

SECTION 13 ADDITIONAL REGULATORY STATUS INFORMATION

TOXIC SUBSTANCES CONTROL ACT: This substance is listed on the Toxic Substances Control Act Inventory.

SUPERFUND AMENDMENT AND REAUTHORIZATION ACT TITLE 3:

HAZARD CATEGORIES, PER 40 CFR 370.2:

HEALTH: None

PHYSICAL: None

EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW, PER 40 CFR 355, APP. A:

EXTREMELY HAZARDOUS SUBSTANCES - THRESHOLD PLANNING QUANTITY:

None Established

SUPPLIER NOTIFICATION REQUIREMENTS, PER 40 CFR 372.45:

None Established

SECTION 14 ADDITIONAL INFORMATION

MSDS REVISION STATUS: Section 11(Personal protection)revised

SECTION 15 MAJOR REFERENCES

References are available upon request

THIS MATERIAL SAFETY DATA SHEET (MSDS) HAS BEEN PREPARED IN COMPLIANCE WITH THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200. THE INFORMATION IN THIS MSDS SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THIS INFORMATION HAS BEEN PREPARED FOR THE GUIDANCE OF PLANT ENGINEERING, OPERATIONS AND MANAGEMENT AND FOR PERSONS WORKING WITH OR HANDLING THIS PRODUCT. ARCH CHEMICALS BELIEVES THIS INFORMATION TO BE RELIABLE AND UP TO DATE AS OF THE DATE OF PUBLICATION BUT, MAKES NO WARRANTY THAT IT IS. ADDITIONALLY, IF THIS MSDS IS MORE THAN THREE YEARS OLD, YOU SHOULD CONTACT ARCH CHEMICALS MSDS CONTROL AT THE PHONE NUMBER ON THE FRONT PAGE TO MAKE CERTAIN THAT THIS DOCUMENT IS CURRENT.

Arch Chemicals, Inc.

MSDS Control

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